

Amendments to the Claims

This Listing of Claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A programmable logic controller comprising:
a backplane having an internal communications bus for connecting one or more
modules of the programmable logic controller with each other;
one or more modules connected to said backplane ~~[[;]]~~ said modules capable of
adapted for communicating over said backplane using the IP protocol;
wherein each module has its own IP address assigned using a local addressing
schema.
2. (Currently Amended) The programmable logic controller of claim 1 wherein the ~~IP address~~
~~uses a~~ local addressing schema uses a Private IP address.
3. (Original) The programmable logic controller of claim 2 wherein the local addressing schema
is in a form of 192.168.XX.YY.
4. (Currently Amended) The programmable logic controller of claim 3 1 wherein a term ~~XX~~ in
the local addressing schema represents the number of the programmable logic controller.
5. (Currently Amended) The programmable logic controller of claim 3 1 wherein a term ~~YY~~ in
the local addressing schema represents a number describing a position in said backplane.
6. (Original) The programmable logic controller of claim 1 wherein the IP protocol is used in
conjunction with a TCP protocol.

7. (Currently Amended) A method of communication between a first module and a second module on a programmable logic controller backplane comprising:

connecting said first ~~modules~~ module to said programmable logic controller backplane wherein the first module is connected to a network of ~~IO~~ I/O modules;
connecting said second module to said programmable logic controller backplane wherein the second module is connected to an Ethernet network;
communicating over an internal communications bus on said backplane between said first module and said second module using the IP protocol,
where the first module and the second module have their own IP address for backplane communications, said IP addresses assigned using a local addressing schema.

8. (Original) The method of communication of claim 7 wherein the Ethernet network is connected to an Internet.

9. (Currently Amended) The method of communication of claim 7 wherein ~~an~~ the addressing schema for the IP address uses a ~~local-addressing-schema~~ term representing the position of the module on the backplane.

10. (Currently Amended) The method of communication of claim 7 wherein the network of ~~IO~~ I/O modules is an Ethernet network.

11. (Original) The method of communications of claim 7 wherein the IP protocol is used in conjunction with a TCP protocol.

12. (Currently Amended) An industrial automation system comprising:

at least one programmable logic controller having a backplane, said backplane having an internal communications bus that is ~~capable of~~ adapted for communicating messages over said ~~to a~~ backplane, wherein the messages are formatted using an IP protocol;

a first network module connected to said backplane that is also connected to an ~~I/O~~ I/O network; and

a second network module connected to said backplane that is also connected to an Ethernet network;

wherein ~~the programmable logic controller,~~ the first network module ~~[[,]]~~ and the second network module each have their own IP address for backplane communications , said IP addresses assigned using a local addressing schema.

13. (Currently Amended) The industrial automation system of claim 12 wherein said Ethernet network is connected to ~~an~~ the Internet.

Please cancel claim 14.

15. (Currently Amended) The industrial automation system of claim ~~12~~ 13 wherein the ~~I/O~~ I/O network is an Ethernet network.

16. (Original) The industrial automation system of claim 12 wherein the IP protocol is used in conjunction with a TCP protocol.

17. (New) The industrial automation system of claim 15 wherein the system is adapted to monitor the operation of a device on the I/O network connected to said first network module, by a user at a remote location on the Internet connected to said second network module, via messages formatted using the IP protocol and communicated between said first and second network modules over said backplane.